

AMENDMENTIn the Claims:

Please cancel claims 5, 11, 17, and 23 ✓

Please amend claims 1, 6, 7, 12, 13, 18, 19, and 24 as follows:

1. (Once Amended) A device for generating a plurality of electron beams

comprising:

- a1
enl
B1
- a) a source of radiation; and,
 - b) a spatial light modulator having a position so as to modulate said radiation emanating from said source of radiation; and,
 - c) a photocathode having a position so as to receive said modulated radiation wherein said photocathode simultaneously produces a plurality of electron beams under impact by said modulated radiation.

a2
5. ✓ (Once Amended) An device as in claim 1 wherein said spatial light modulator is a micromirror array.

- enl
B2
7. (Once Amended) An electron beam lithography system comprising:
- a) a source of radiation; and,
 - b) a spatial light modulator having a position so as to modulate said radiation emanating from said source of radiation; and,
 - c) a photocathode having a position so as to receive said modulated radiation wherein said photocathode simultaneously produces a plurality of electron beams under impact by said modulated radiation; and
 - d) an electron beam optical column having a position so as to receive said plurality of electron beams and to direct said plurality of electron beams onto a target.

a3
10. ✓
12. (Once Amended) A system as in claim 7 wherein said spatial light modulator is a micromirror array.

13. (Once Amended) A method of producing a plurality of electron beams comprising:

- a) directing radiation onto a spatial light modulator, thereby modulating said radiation; and,
- b) directing said modulated radiation onto a photocathode thereby simultaneously producing a plurality of electron beams.

15. (Once Amended) A method as in claim 13 wherein said spatial light modulator is a micromirror array.

19. (Once Amended) A method of performing lithography with multiple beams of electrons comprising:

- a) directing radiation onto a spatial light modulator, thereby modulating said radiation; and,
- b) directing said modulated radiation onto a photocathode thereby simultaneously producing a plurality of electron beams; and,
- c) directing said plurality of electron beams onto an acceptance region of an electron beam optical column, producing thereby a plurality of electron beams impacting a target located at the target end of said electron beam optical column.

20. (Once Amended) A method as in claim 19 wherein said spatial light modulator is a micromirror array.